



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/792,038

03/03/2004

Melissa K. Rath

ATMI-668

4823

24239 7590 07/09/2007

MOORE & VAN ALLEN PLLC

P.O. BOX 13706

Research Triangle Park, NC 27709

EXAMINER

LE, HOA VAN

ART UNIT

PAPER NUMBER

1752

MAIL DATE

DELIVERY MODE

07/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/792,038	Applicant(s) RATH ET AL.	
	Examiner Hoa V. Le	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2007 and 19 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-31 and 33-59 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,10,14,15,17,19-21,53,56,57 and 59 is/are rejected.
- 7) ☒ Claim(s) 7 with the elected Formula G and 57 is/are objected to.
- 8) ☒ Claim(s) See Continuation Sheet are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>---</u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Continuation of Disposition of Claims: Claims withdrawn from consideration are (4, 6, 7 with Formulas A to F and H to C2, 8-9, 11-13, 18, 22-23 and 54-55 with respect to the non-election of sub-species) and (24-31, 33-52 and 58 with respect non-elected invention).

Continuation of Disposition of Claims: Claims subject to restriction and/or election requirement are (4, 6, 7 with Formulas A to F and H to C2, 8-9, 11-13, 18, 22-23 and 54-55 with respect to the non-election of sub-species) and (24-31, 33-52 and 58 with respect non-elected invention)..

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The indication of the allowance of the claims is the presence of "oxirane" in the claims. Ms. Tristan Anne Fuierer points out that there is an error since "oxirane" is an alternative chemical ingredient only with the language "at one component" but not all components with the requirement of "oxirane". The examiner accepts the error and withdraws the "Ex Parte Quayle" Office action mailed on 19 April 2007. An election of species on the record will be no longer applied, when "oxirane" is a requisite chemical ingredient in another claim, such as at least claim 1. A restriction will be issued. The record shows that in response to the "Ex Parte Quayle" Office action mailed on 19 April 2007, an amendment is filed on 19 June 2007. There is no need for it since the "Ex Parte Quayle" Office action mailed on 19 April 2007 is withdrawn. Accordingly, the fully claimed set filed on 13 March 2007 is sufficient and considered. Next Office action may be a restriction. Ms. Tristan Anne Fuierer states that she has always intended to have or make claim 7 to depend on claim 1.

**HOA VAN LE**  
**PRIMARY EXAMINER**

This is in response to Papers filed on 19 June 2007.

I. Telephone call is made on 06 July 2007 by Hoa Van Le to Ms. Tristan Anne Fuierer.

The indication of the allowance of the claims is the presence of "oxirane" in the claims.

Ms. Tristan Anne Fuierer points out that there is an error since "oxirane" is an alternative chemical ingredient only with the language "at one component" but not all components with the requirement of "oxirane".

The examiner accepts the error and withdrawn the "Ex Parte Quayle" Office action mailed on 19 April 2007. An election of species on the record will be no longer applied, when "oxirane" is a requisite chemical ingredient in another claim, such as at least claim 1. A restriction will be issued. The record shows that in response to the "Ex Parte Quayle" Office action mailed on 19 April 2007, an amendment is filed on 19 June 2007. There is no need for it since the "Ex Parte Quayle" Office action mailed on 19 April 2007 is withdrawn. Accordingly, the fully claimed set filed on 13 March 2007 is sufficient and considered. Next Office action may be a restriction.

Ms. Tristan Anne Fuierer states that she has always intended to have or make claim 7 to depend on claim 1.

II. After a carefully reviewing and studying record, since there have been two restrictions on the record. Accordingly, no additional restriction is needed.

III. The record shows that applicants elect sub-species of Formula G.

IV. In view of the amendment filed on 13 March 2007 in claim 8 with “dinonyphenol ethoxlate”, at least claims 8 and its dependent claims 9, 11-13 and 22-23 are additionally and effectively applied under election of species of the elected species of Formula G on the record since it does not contain “dinonyphenol ethoxlate”

V. The elected sub-species of Formula G are continuously considered and searched. During the course of searching for the elected sub-species of Formula G, other are found and applied. The remaining non-elected species are not now considered, searched or examined until all of the applied species on the record are overcome. The applied references are on

Art Unit: 1752

the found and available art since applicants already have their election.

However, applicants may point out that one or more of the nonelected sub-species of claims 4, 6, 7 with Formulas A to F and H to C2, 8-9, 11-13, 18, 22-23 and 54-55 are perfectly rejected by one or more of the above applied references in the next response to this Office action in order for it to be considered timely.

VI. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 10, 19-21, 53 and 56 with respect to the application of the sub-species are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yokoi et al (2004/0259761).

Yokoi et al disclose and teach a cleaner for cleaning and/or removing photoresist film. The cleaner comprises a quaternary base, potassium hydroxide, water, water-soluble solvent and (thioglycerol as newly amended). Please see the whole disclosure of the applied reference, especially at paragraphs 0030 to 0053, 0061-0066. The embodiment of the ability or capability of “removing...” or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone shows to the same or obviously the same functionally claimed property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. Since Yokoi et al are reasonably disclosed and taught the claimed embodiments, the above claims are found to be anticipated by Yokoi et al.

In an alternative, the remote teachings and/or suggestions would be sufficient to found the claims to be rendered prima-facie obvious by Yokoi et al.

Art Unit: 1752

VII. Claims 1-2, 5, 10, 19-21, 53 and 56 with respect to the application of the sub-species are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hsu (2005/0176603).

Hsu discloses and teaches a cleaner for cleaning and/or removing photoresist film. The cleaner comprises a quaternary base, potassium hydroxide, water, water-soluble solvent and (mercaptobenzothiazole and 2-mercaptobenzimidazole as newly amended). Please see the whole disclosure of the applied reference, especially at paragraphs 0012 to 0027. The embodiment of the ability or capability of “removing...” or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone shows to the same or obviously the same functionally claimed property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. Since Hsu is reasonably disclosed and taught the claimed embodiments, the above claims are found to be anticipated by Hsu.

Art Unit: 1752

In an alternative, the remote teachings and/or suggestions would be sufficient to found the claims to be rendered prima-facie obvious by Hsu.

VIII. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5, 10, 19-21, 53 and 56 with respect to the application of the sub-species are rejected under 35 U.S.C. 103(a) as obvious over Ichiki (2001/0021488) considered in view of En et al (2004/0134682).

Ichiki discloses, teaches and suggests a cleaner for cleaning and/or removing photoresist film. The cleaner comprises a quaternary base, water, water-soluble solvent and (thioglycerol as newly amended). Please see the whole disclosure of the applied reference, especially at paragraphs 0027 to 0035 and 0039. The embodiment of the ability or capability of "removing..." or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in In re Schreiber, 44 USPQ2d

Art Unit: 1752

1429. An allowed claim or patent would have no value when someone shows to the same or obviously the same functionally claimed property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference.

Ichiki does not specify an addition potassium hydroxide alkaline agent. However, it is known in the art at the time the invention was made to use potassium hydroxide alkaline agent to provide an alkalinity and stripping power. Evidence can be seen in at least En et al at paragraph 0550, 0600, 0612, 0620, 0653, 0714, 0754 and 0774.

Since the above references are all related to cleaners and/or removers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite potassium hydroxide alkaline agent for a reasonable expectation of sufficiently providing an additional alkalinity and stripping power to one having ordinary skill in the art.

IX. The arguments filed on 13 March and 19 June have been fully considered but are not applied since the above rejections are applied with new references or new sets of the references.

X. Chemical ingredients and their amounts of the elected Formula G in claim 7 have been considered and searched. The same are with it's closely related claims 57. In the absence of a pertinent reference again the elected Formula G and claim 57, no rejection is made. However, the elected Formula G and claim 57 are objected to but would be allowable if each of them is rewritten in an independent form.

XI. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Art Unit: 1752

will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

XII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

Art Unit: 1752

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le  
Primary Examiner  
Art Unit 1752

HVL  
06 July 2007

HOA VAN LE  
PRIMARY EXAMINER  
*Hoa Van Le*